

OIPE

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/801,968

DATE: 07/19/2001

TIME: 15:58:46

Input Set : A:\40901.app.txt

Output Set: N:\CRF3\07192001\I801968.raw

ENTERED

4 <110> APPLICANT: Itoh, Nobuyuki
 5 Kavanaugh, W. Michael
 8 <120> TITLE OF INVENTION: HUMAN FGF-23 GENE AND GENE EXPRESSION
 9 PRODUCTS
 12 <130> FILE REFERENCE: PP-17150.001/201130.40901
 15 <140> CURRENT APPLICATION NUMBER: 09/801,968
 16 <141> CURRENT FILING DATE: 2001-03-07
 19 <160> NUMBER OF SEQ ID NOS: 46
 21 <170> SOFTWARE: FastSEQ for Windows Version 4.0
 23 <210> SEQ ID NO: 1
 24 <211> LENGTH: 756
 25 <212> TYPE: DNA
 26 <213> ORGANISM: Mus musculus
 28 <400> SEQUENCE: 1
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 30 actgctagag cctatccaga cacttccccca ttgctggct ccaactgggg aagcctgacc 120
 31 cacctgtaca cggctacagc caggaccagc tatcacctac agatccatag ggatggtcat 180
 32 gtagatggca ccccccata gaccatctac agtgcctga tgattacatc agaggacgcc 240
 33 ggctctgtgg tgataaacagg agccatgact cgaaggttcc tttgtatgaa tctccacggc 300
 34 aacatttttg gatcgcttca ctcagccca gagaattgca agttccgcca gtggacgctg 360
 35 gagaatggct atgacgtcta ctgtcgca aagcatcaact acctggtagag cctggccgc 420
 36 gccaagcgca ttttccagcc gggcaccaac ccgcgcgcct tctcccgatt cctggctcgc 480
 37 aggaacgagg tcccgctgct gcacttctac actgttcgccc cacggcgcca cacgcgcagc 540
 38 gccgaggacc caccggagcg cgaccactg aacgtgtca agccgcggcc ccgcgcacgc 600
 39 cctgtgcctg tatacgtctc tcgagactg ccgagcgcag aggaaggtagg ccccgccagcc 660
 40 agcgatcctc tgggggtgct ggcagaggc cgtggagatg ctcgcggggg cgcgggaggc 720
 41 gcggataggt gtcgcccattt tcccaaggttc gtctag 756
 43 <210> SEQ ID NO: 2
 44 <211> LENGTH: 251
 45 <212> TYPE: PRT
 46 <213> ORGANISM: Mus musculus
 48 <400> SEQUENCE: 2
 49 Met Leu Gly Thr Cys Leu Arg Leu Leu Val Gly Val Leu Cys Thr Val
 50 1 5 10 15
 51 Cys Ser Leu Gly Thr Ala Arg Ala Tyr Pro Asp Thr Ser Pro Leu Leu
 52 20 25 30
 53 Gly Ser Asn Trp Gly Ser Leu Thr His Leu Tyr Thr Ala Thr Ala Arg
 54 35 40 45
 55 Thr Ser Tyr His Leu Gln Ile His Arg Asp Gly His Val Asp Gly Thr
 56 50 55 60
 57 Pro His Gln Thr Ile Tyr Ser Ala Leu Met Ile Thr Ser Glu Asp Ala
 58 65 70 75 80
 59 Gly Ser Val Val Ile Thr Gly Ala Met Thr Arg Arg Phe Leu Cys Met
 60 85 90 95
 61 Asp Leu His Gly Asn Ile Phe Gly Ser Leu His Phe Ser Pro Glu Asn
 62 100 105 110
 63 Cys Lys Phe Arg Gln Trp Thr Leu Glu Asn Gly Tyr Asp Val Tyr Leu

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64	115	120	125
65	Ser Gln Lys His His Tyr Leu Val Ser Leu Gly Arg Ala Lys Arg Ile		
66	130	135	140
67	Phe Gln Pro Gly Thr Asn Pro Pro Pro Phe Ser Gln Phe Leu Ala Arg		
68	145	150	155
69	Arg Asn Glu Val Pro Leu Leu His Phe Tyr Thr Val Arg Pro Arg Arg		
70	165	170	175
71	His Thr Arg Ser Ala Glu Asp Pro Pro Glu Arg Asp Pro Leu Asn Val		
72	180	185	190
73	Leu Lys Pro Arg Pro Arg Ala Thr Pro Val Pro Val Ser Cys Ser Arg		
74	195	200	205
75	Glu Leu Pro Ser Ala Glu Glu Gly Gly Pro Ala Ala Ser Asp Pro Leu		
76	210	215	220
77	Gly Val Leu Arg Arg Gly Arg Gly Asp Ala Arg Gly Gly Ala Gly Gly		
78	225	230	235
79	Ala Asp Arg Cys Arg Pro Phe Pro Arg Phe Val		
80	245	250	
82	<210> SEQ ID NO: 3		
83	<211> LENGTH: 756		
84	<212> TYPE: DNA		
85	<213> ORGANISM: Homo sapiens		
87	<400> SEQUENCE: 3		
88	atgttggggg cccgccttcag gctctgggtc tgcgccttgt gcagcgctcg cagcatgagc	60	
89	gtcctcagag cctatcccaa tgcctccccca ctgctcggt ccagctgggg tggcctgatc	120	
90	cacctgtaca cagccacacgc caggaacacgc taccacctgc agatccacaaa gaatggccat	180	
91	gtggatggcg caccccatca gaccatctac agtgcctga tgatcagatc agaggatgct	240	
92	ggctttgtgg tgattacagg tgcgtatgagc agaagatacc tctgcattgg tttcagaggc	300	
93	aacatttttg gatcacacta ttgcgaccgc gagaactgca gttccaaca ccagacgctg	360	
94	aaaaaacgggt acgacgtcta ccacttcctc cagtatcaact tcctggtcag tctggccgg	420	
95	gcgaagagag ctttcctgccc aggcattaaac ccaccccgactcccgatc cctgtccgg	480	
96	aggaacgaga tccccctaat tcacttcaac acccccatac cacggcggca caccggagc	540	
97	gccgaggacg actcggagcg ggacccctgt aacgtgctga agccccgggc ccggatgacc	600	
98	ccggccccgg ctcctgttc acaggagctc ccgagcgcgg aggacaacag cccgatggcc	660	
99	agtgacccat taggggttgt cagggggcggt cgagtgaaca cgcacgctgg gggAACGGGC	720	
100	ccggaaggct gcccgcctt cgccaaatgttc atctag	756	
102	<210> SEQ ID NO: 4		
103	<211> LENGTH: 251		
104	<212> TYPE: PRT		
105	<213> ORGANISM: Homo sapiens		
107	<400> SEQUENCE: 4		
108	Met Leu Gly Ala Arg Leu Arg Leu Trp Val Cys Ala Leu Cys Ser Val		
109	1 5 10 15		
110	Cys Ser Met Ser Val Leu Arg Ala Tyr Pro Asn Ala Ser Pro Leu Leu		
111	20 25 30		
112	Gly Ser Ser Trp Gly Gly Leu Ile His Leu Tyr Thr Ala Thr Ala Arg		
113	35 40 45		
114	Asn Ser Tyr His Leu Gln Ile His Lys Asn Gly His Val Asp Gly Ala		
115	50 55 60		
116	Pro His Gln Thr Ile Tyr Ser Ala Leu Met Ile Arg Ser Glu Asp Ala		

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117	65	70	75	80
118	Gly Phe Val Val Ile Thr Gly Val Met Ser Arg Arg Tyr Leu Cys Met			
119	85	90	95	
120	Asp Phe Arg Gly Asn Ile Phe Gly Ser His Tyr Phe Asp Pro Glu Asn			
121	100	105	110	
122	Cys Arg Phe Gln His Gln Thr Leu Glu Asn Gly Tyr Asp Val Tyr His			
123	115	120	125	
124	Ser Pro Gln Tyr His Phe Leu Val Ser Leu Gly Arg Ala Lys Arg Ala			
125	130	135	140	
126	Phe Leu Pro Gly Met Asn Pro Pro Pro Tyr Ser Gln Phe Leu Ser Arg			
127	145	150	155	160
128	Arg Asn Glu Ile Pro Leu Ile His Phe Asn Thr Pro Ile Pro Arg Arg			
129	165	170	175	
130	His Thr Arg Ser Ala Glu Asp Asp Ser Glu Arg Asp Pro Leu Asn Val			
131	180	185	190	
132	Leu Lys Pro Arg Ala Arg Met Thr Pro Ala Pro Ala Ser Cys Ser Gln			
133	195	200	205	
134	Glu Leu Pro Ser Ala Glu Asp Asn Ser Pro Met Ala Ser Asp Pro Leu			
135	210	215	220	
136	Gly Val Val Arg Gly Gly Arg Val Asn Thr His Ala Gly Gly Thr Gly			
137	225	230	235	240
138	Pro Glu Gly Cys Arg Pro Phe Ala Lys Phe Ile			
139	245	250		
141	<210> SEQ ID NO: 5			
142	<211> LENGTH: 20			
143	<212> TYPE: DNA			
144	<213> ORGANISM: Artificial Sequence			
146	<220> FEATURE:			
147	<223> OTHER INFORMATION: Sense PCR primer			
149	<400> SEQUENCE: 5			
150	agcaccaggcc actcagagca			20
152	<210> SEQ ID NO: 6			
153	<211> LENGTH: 20			
154	<212> TYPE: DNA			
155	<213> ORGANISM: Artificial Sequence			
157	<220> FEATURE:			
158	<223> OTHER INFORMATION: Antisense PCR primer			
160	<400> SEQUENCE: 6			
161	cttccagcga cccttagatga			20
163	<210> SEQ ID NO: 7			
164	<211> LENGTH: 21			
165	<212> TYPE: DNA			
166	<213> ORGANISM: Artificial Sequence			
168	<220> FEATURE:			
169	<223> OTHER INFORMATION: Sense primer for mouse FGF-23			
171	<400> SEQUENCE: 7			
172	ctgatgatta catcagagga c			21
174	<210> SEQ ID NO: 8			
175	<211> LENGTH: 20			

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176 <212> TYPE: DNA
 177 <213> ORGANISM: Artificial Sequence
 179 <220> FEATURE:
 180 <223> OTHER INFORMATION: Antisense primer for mouse FGF-23
 182 <400> SEQUENCE: 8

183 caccaggttag tgatgcttct 20
 185 <210> SEQ ID NO: 9
 186 <211> LENGTH: 21
 187 <212> TYPE: DNA
 188 <213> ORGANISM: Artificial Sequence
 190 <220> FEATURE:
 191 <223> OTHER INFORMATION: Antisense primer for mouse FGF-23
 193 <400> SEQUENCE: 9

194 atccatacaa aggaaccttc g 21
 196 <210> SEQ ID NO: 10
 197 <211> LENGTH: 27
 198 <212> TYPE: DNA
 199 <213> ORGANISM: Artificial Sequence
 201 <220> FEATURE:
 202 <223> OTHER INFORMATION: adaptor primer
 204 <400> SEQUENCE: 10

205 ccatcctaattc acgactcaact ataggc 27
 207 <210> SEQ ID NO: 11
 208 <211> LENGTH: 23
 209 <212> TYPE: DNA
 210 <213> ORGANISM: Artificial Sequence
 212 <220> FEATURE:
 213 <223> OTHER INFORMATION: adaptor primer
 215 <400> SEQUENCE: 11

216 actcactataa gggctcgagc ggc 23
 218 <210> SEQ ID NO: 12
 219 <211> LENGTH: 20
 220 <212> TYPE: DNA
 221 <213> ORGANISM: Artificial Sequence
 223 <220> FEATURE:
 224 <223> OTHER INFORMATION: Sense primer for mouse FGF-23.
 226 <400> SEQUENCE: 12

227 actcagtgcgt gtgcaatgct 20
 229 <210> SEQ ID NO: 13
 230 <211> LENGTH: 20
 231 <212> TYPE: DNA
 232 <213> ORGANISM: Artificial Sequence
 234 <220> FEATURE:
 235 <223> OTHER INFORMATION: Antisense primer for mouse FGF-23
 237 <400> SEQUENCE: 13

238 gaccttagacg aacctggaa 20
 240 <210> SEQ ID NO: 14
 241 <211> LENGTH: 216
 242 <212> TYPE: PRT

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Input Set : A:\40901.app.txt
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243 <213> ORGANISM: Homo sapiens
 245 <400> SEQUENCE: 14
 246 Met Arg Ser Gly Cys Val Val Val His Val Trp Ile Leu Ala Gly Leu
 247 1 5 10 15
 248 Trp Leu Ala Val Ala Gly Arg Pro Leu Ala Phe Ser Asp Ala Gly Pro
 249 20 25 30
 250 His Val His Tyr Gly Trp Gly Asp Pro Ile Arg Leu Arg His Leu Tyr
 251 35 40 45
 252 Thr Ser Gly Pro His Gly Leu Ser Ser Cys Phe Leu Arg Ile Arg Ala
 253 50 55 60
 254 Asp Gly Val Val Asp Cys Ala Arg Gly Gln Ser Ala His Ser Leu Leu
 255 65 70 75 80
 256 Glu Ile Lys Ala Val Ala Leu Arg Thr Val Ala Ile Lys Gly Val His
 257 85 90 95
 258 Ser Val Arg Tyr Leu Cys Met Gly Ala Asp Gly Lys Met Gln Gly Leu
 259 100 105 110
 260 Leu Gln Tyr Ser Glu Glu Asp Cys Ala Phe Glu Glu Glu Ile Arg Pro
 261 115 120 125
 262 Asp Gly Tyr Asn Val Tyr Arg Ser Glu Lys His Arg Leu Pro Val Ser
 263 130 135 140
 264 Leu Ser Ser Ala Lys Gln Arg Gln Leu Tyr Lys Asn Arg Gly Phe Leu
 265 145 150 155 160
 266 Pro Leu Ser His Phe Leu Pro Met Leu Pro Met Val Pro Glu Glu Pro
 267 165 170 175
 268 Glu Asp Leu Arg Gly His Leu Glu Ser Asp Met Phe Ser Ser Pro Leu
 269 180 185 190
 270 Glu Thr Asp Ser Met Asp Pro Phe Gly Leu Val Thr Gly Leu Glu Ala
 271 195 200 205
 272 Val Arg Ser Pro Ser Phe Glu Lys
 273 210 215
 275 <210> SEQ ID NO: 15
 276 <211> LENGTH: 209
 277 <212> TYPE: PRT
 278 <213> ORGANISM: Homo sapiens
 280 <400> SEQUENCE: 15
 281 Met Asp Ser Asp Glu Thr Gly Phe Glu His Ser Gly Leu Trp Val Ser
 282 1 5 10 15
 283 Val Leu Ala Gly Leu Leu Leu Gly Ala Cys Gln Ala His Pro Ile Pro
 284 20 25 30
 285 Asp Ser Ser Pro Leu Leu Gln Phe Gly Gly Gln Val Arg Gln Arg Tyr
 286 35 40 45
 287 Leu Tyr Thr Asp Asp Ala Gln Gln Thr Glu Ala His Leu Glu Ile Arg
 288 50 55 60
 289 Glu Asp Gly Thr Val Gly Gly Ala Ala Asp Gln Ser Pro Glu Ser Leu
 290 65 70 75 80
 291 Leu Gln Leu Lys Ala Leu Lys Pro Gly Val Ile Gln Ile Leu Gly Val
 292 85 90 95
 293 Lys Thr Ser Arg Phe Leu Cys Gln Arg Pro Asp Gly Ala Leu Tyr Gly
 294 100 105 110

VERIFICATION SUMMARY

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